# SOME NOTES CONCERNING AMERICAN HEBRIDAE, WITH THE DESCRIPTIONS OF A NEW SPECIES AND SUBSPECIES (HEMIPTERA)

JOHN T. POLHEMUS, 3115 S. York, Englewood, Colorado 80110 and HAROLD C. CHAPMAN, Entomology Research Division, Agricultural Research Service, U. S. Department of Agriculture, Lake Charles, Louisiana 70601

ABSTRACT—*Hebrus* pilosidorsus, n. sp. from Peru and *H. buenoi* furvus, n. subsp. from Louisiana and Florida are described and brief notes concerning other species are presented. New synonymy noted: *H. hubbardi* (=*H. piercei*).

This paper presents synonymical notes concerning *Hebrus hubbardi* Porter, describes a new subspecies of *Hebrus buenoi* Drake and Harris found in the southeastern United States, and a new species of *Hebrus* Curtis from Peru. All material is in the collections of the authors unless otherwise noted.

We are indebted to Dr. George Byers of the University of Kansas for the loan of some of the specimens used in this study, and to Dr. P. Wygodzinski of the American Museum of Natural History for the opportunity to study the hebrid from Peru.

## Hebrus hubbardi Porter

Hebrus hubbardi Porter, 1952a, Jour. Kansas Ent. Soc. 25:10 (Palm Springs, Calif.). Hebrus piercei Porter, 1952b, Jour. Kansas Ent. Soc. 25:147 (Arizona). New synonymy.

Although we earlier treated them as separate species (Polhemus and Chapman, 1966), the comparison of many specimens of *Hebrus piercei*, including paratypes, with topotypes and a paratype of *Hebrus hubbardi* leads us to conclude that they are conspecific.

While the Palm Springs specimens of *hubbardi* are somewhat lighter in color and have a shallower notch in the scutellum than some of the specimens from further east (Nevada, Arizona and Colorado), specimens similar to those from Palm Springs can also be found in the latter series.

The most obvious external character separating *hubbardi* from other hebrids occurring in the same region is the medial interruption of the row of pronotal pits along the collar, which was depicted by Porter in both of his figures (Porter, 1952A, 1952B).

Three of the five brachypterous female paratypes of *II. piercei* from Oak Creek Canyon, Arizona, were also studied. These have the row of pronotal pits along the collar continuous, and are *Hebrus obscura* Polhemus and Chapman. The latter species was described from the same area in Arizona.

### Hebrus buenoi furvus, n. subsp.

This subspecies differs from the typical form in being generally darker, especially the hemelytra which are often almost black. In the typical form (*H. buenoi buenoi*), the hemelytra are light brown yellow and marked with yellowish brown and white, whereas in *furcus* they are a sooty brown with similar white markings on the membrane and white lines or spots at the base of both the inner and outer corium.

The latter markings are very striking against the dark background, and caused *buenoi furvus* to be confused with Champion's *Hebrus bilineatus*<sup>1</sup> in the past. This confusion is understandable, as they are superficially quite similar; however *bilineatus* lacks the median furrow on the vertex common to all forms of *buenoi* and the parameres are different. The parameres of *buenoi furvus* are identical to the typical form; these have been figured by Drake and Chapman (1958).

The present distribution of typical *H. buenoi* includes: New York, New Jersey, Oregon, Pennsylvania, Virginia, Washington, D. C., Massachusetts, Ohio, Michigan, Wisconsin, Illinois, Iowa, Kansas, Nebraska, and Colorado. The Mississippi, Florida and Mexico records given by Drake and Chapman (loc. cit.) are presumed to refer to *buenoi furcus*, as the authors have seen no specimens of typical *buenoi* from the southern states, nor any intergrades.

Material: Holotype  $\delta$ , allotype  $\Im$ , and paratypes,  $6 \delta \delta$ ,  $3 \Im \Im$ , Grand Chenier, La., XI-II-1964, H. C. Chapman. Also paratypes as follows: 1  $\delta$ , Homestead, Fla., Coastal Marsh, CL407, II-3-1968, J. T. Polhemus; 1  $\Im$ , Mims, Fla., April 2, 1952, H. C. Chapman; the following all from Orlando, Fla.,  $2 \delta \delta$ , Feb. 8–10, 1952; 1  $\Im$ , March 14, 1952;  $2 \Im \Im$ , April 22, 1952; 1  $\Im$ , April 2, 1952; 1  $\delta$ , Feb. 8, 1953; 1  $\delta$ , April 26, 1952, all collected by H. C. Chapman;  $2 \Im \Im$ , Lake Placid, Fla., 7-13-1948, R. H. Beamer (Univ. of Kansas).

Holotype and Allotype in Polhemus collection, paratypes in collections of both authors and in the Snow Entomological Collection, University of Kansas.

#### Hebrus pilosidorsus, n. sp.

Brachypterous female: Moderate size, robust, light orange-brown, with raised posterior portion of head, posterior one-fifth of pronotum, and posterior portion of scutellum fuscous. Entire dorsal surface rather thickly clothed with long erect hairs. Medial areas of abdominal segments shining. Thorax beneath light orange brown, becoming darker posteriorly; abdomen beneath fuscous, shining, segments indistinct, lighter colored posteriorly and toward connexivum, thickly clothed with long decumbent whitish pubescence. Legs yellowish, clothed with whitish to yel-

<sup>&</sup>lt;sup>1</sup> The type of H. bilineatus Champion has been borrowed from the Vienna Museum, through the kindness of Prof. Max Beier, and compared with a series of this species recently collected in Mexico. This species will be discussed in another publication.

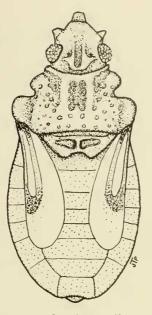


Fig. I, Hebrus pilosidorsus, n. sp., dorsal view (hairy vestiture not shown).

lowish hairs, mostly short, with scattered longer hairs; antenna with long hairs on segments 3, 4, and 5, shorter hairs on segments 1 and 2. Rostrum long, pale yellow-brown, reaching onto base of abdomen; rostral canal deep, not interrupted between hind coxae.

Antenna long, segments I and II stout, III, IV and V slender; measurements— I, 13; II, 10; III, 18; IV, 11; V, 16 (60 units equal one millimeter). Head long, declivent anteriorly; with a deep medial longitudinal sulcus, ending posteriorly as shown in fig. I, bordered by a raised, sculptured structure on vertex, this structure evanescent anteriorly; ocellar pits deep, without apparent ocelli; with a rather prominent laterally projecting nodule cephalad of each eye, above and caudad of antenna socket.

Dorsal surface as shown in fig. 1. Hemelytra whitish; veins prominent, orange brown, becoming piceous basally and apically.

Length 2.0 mm; width .90 mm. Male unknown.

Holotype, female, Peru: 1000 m., Estancia Naranjal, San Ramon, Dep. Junin, VII-20-27, 1965, P. & B. Wygodzinsky collectors. In American Museum of Natural History, New York.

While we are reluctant to describe a new hebrid from a single female, this species is so different from any of the described species that the recognition of the male should not present a problem. The robust shape, deeply pitted pronotum and very hairy dorsum are diagnostic.

The rather prominent facial nodules or tubercles also are apparently

a good specific character. H. sessoris Drake and Harris possess much weaker nodules, and of the 32 species of Hebrus examined for this character, nine species possessed such structures in noticeable form, including obscura, pudoris Drake and Harris, laeviventris Champion. elimatus Drake and Cobben, priscus Drake and Harris and three species from Asia and Africa. In some other species a broad swelling occurs laterally forward of the eve, and in others the head curves smoothly from the eye forward to the apex of the head. Of the hairy hebrids, perhaps H. gloriosus Drake and Harris and H. sessoris are the closest to pilosidorsus. Specimens of the former two species belonging to the University of Kansas, and the type of sessoris in the Drake collection (USNM) have been studied. These species were described from Brazil. H. sessoris is narrower, less hairy, has the median sulcus on the head extending to the posterior margin, and has less pronounced pits on the pronotum than *pilosidorsus*. H. gloriosus is narrower vet, has only decumbent hairs of moderate length on the dorsum of the abdomen, and has no obvious median sulcus on the head.

The name *pilosidorsus* refers to the hairy vestiture of the dorsal surface, an unusual character in the Hebridae.

#### References

**Drake, C. J.** and **H. C. Chapman**. 1958. New neotropical Hebridae, including a catalogue of the American species (Hemiptera). Jour. Wash. Acad. Sci. 48(10):317–326.

Polhemus, J. T. and H. C. Chapman. 1966. Notes on some Hebridae from the United States with the description of a new species (Hemiptera). Proc. Ent. Soc. Wash. 68(3):209-211.

Porter, T. W. 1952a. Three new species of Hebridae (Hemiptera) from the Western Hemisphere. Jour. Kans. Ent. Soc. 25(1):9–12.

\_\_\_\_\_\_. 1952b. Three new species of Hebridae (Hemiptera) from the Southwest. Jour. Kans. Ent. Soc. 25(4):147–149.

# A NEW NAME FOR ONTHOPHAGUS MONTICOLUS HOWDEN AND CARTWRIGHT

(COLEOPTERA: SCARABAEIDAE)

Dr. Eric Matthews recently informed us that the name Onthophagus monticolus Howden and Cartwright (1963, p. 61, Proc. U. S. Nat. Mus. No. 3467) was preoccupied by Onthophagus monticola Paulian (1937, p. 343, Arb. Morph. Taxon. Ent. Berlin, Vol. 4). Consequently we propose Onthophagus mextexus, new name, as a substitute for Onthophagus monticolus Howden and Cartwright.—H. F. HOWDEN, Department of Biology, Carleton University, Ottawa, Canada and O. L. CARTWRICHT, Department of Entomology, Smithsonian Institution, Washington, D. C. 20560.